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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,391	07/18/2003	Ta-Kuang Chang	4425-307	2465

7590

03/23/2004

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EXAMINER

JOYCE, HAROLD

ART UNIT

PAPER NUMBER

3749

DATE MAILED: 03/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/621,391

Applicant(s)

CHANG ET AL.

Examiner

Harold Joyce

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) 18-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10, 11, 12 and 17 is/are rejected.
- 7) ☒ Claim(s) 9 and 12-16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by the Australian patent.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Australian patent in view of Wonsetler. The Australian patent discloses the claimed invention including a fan 58 and a suitable filter arrangement (page 7, line 35 to page 8, line 2). The Australian patent does not disclose a centrifugal fan and a HEPA/ULPA filter and prefilter. Wonsetler teaches that it is known to provide an exhausting station with a squirrel cage type fan and a fine filter and coarse filter as set forth at column 3, lines 43-63. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the fume cabinet of the Australian patent with a

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centrifugal fan and a HEPA/ULPA filter and prefilter, as taught by Wonsetler in order to provide an equivalent type of air mover and suitable filter arrangement.

5. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Australian patent in view of Wilk et al. The Australian patent discloses the claimed invention except for a bottom partition having plural outlets and four sidewalls having a sloping profile. Wilk et al. teaches that it is known to provide a gas, smoke, solid particles and the like removal device with plural outlets and four sloping side walls as set forth at column 3, line 63 to column 4, line 17. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the fume cabinet of the Australian patent with plural outlets and four sloping side walls, as taught by Wilk et al. in order to reduce the speed and energy of spark particles.

6. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Australian patent in view of Volk et al. The Australian patent discloses the claimed invention except for the high-pressure spray gun or vacuum suction system. Volk et al. teaches that it is known to provide a cleaning apparatus with a line as set forth at column 2, lines 27-49. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the fume cabinet of the Australian patent with a high pressure spray gun, as taught by Volk et al. in order to remove debris from the work piece. It is well known that vacuum suction system may inherently be substituted for the spray gun in order to remove debris from a work piece.

7. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over the Australian patent in view of Mai. The Australian patent discloses the claimed invention ex-

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cept for the light source. Mai teaches that it is known to provide a vented hood with a light bulb as set forth at column 2, lines 65-67. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the fume cabinet of the Australian patent with a light source, as taught by Mai for its obvious intended purpose.

### ***Allowable Subject Matter***

8. Claims 9 and 13-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Election/Restrictions***

9. Claims 18-39 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the paper filed February 25, 2004. The traversal is on the ground(s) that there is the entire application can be examined without a serious burden of the Examiner. This is not found persuasive because there is a serious burden on the Examiner in searching the species of Figure 3.

The requirement is still deemed proper and is therefore made FINAL.

### ***Drawings***

10. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the centrifugal fan (claim 2), high-pressure spray gun (claim 10), and vacuum suction unit (claim 11) must

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be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

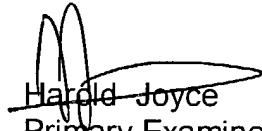
**Conclusion**

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harold Joyce whose telephone number is (703) 308-0274. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira Lazarus can be reached on (703) 308-1935. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Harold Joyce  
Primary Examiner  
Art Unit 3749